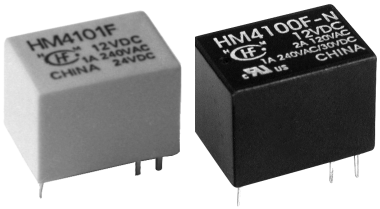
HM4100F/4101F SUBMINIATURE INTERMEDIATE POWER RELAY

VDE
File No.:40000155

c UL us
File No.:E170653



Features

* Extremely low cost
* 1 Form C configuration
* Standard PCB layout
* Sealed IP67& flux proof types available

CONTACT DATA

Type	1C
Initial Contact Resistance	100mΩ (at 1A 24VDC)
Contact Material	AgNi
Contact Rating (Res. Load)	H: 1A 120VAC/30VDC N&B: 1A 240VAC/30VDC 2A 120VAC
Max. switching voltage	300VAC/150VDC
Max. switching current	2A
Max. switching power	240VA/30W
Mechanical life	1 x 10^7 OPS
Electrical life	1 x 10^5 OPS

COIL

Coil power	H:200 mW; N: 360mW; B: 450 mW

COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. allowable Voltage (at 25°C) VDC	Coil Resistance Tolerance:±10%		
				H	N	B
3	2.3	0.3	3.9	45	25	20
5	3.8	0.5	6.5	120	70	56
6	4.5	0.6	7.8	180	100	80
9	6.8	0.9	11.7	400	220	180
12	9.0	1.2	15.6	700	400	320
24	18.0	2.4	31.2	2800	1600	1280

CHARACTERISTICS

Initial Insulation Resistance		100M Ω (500 VDC)
Dielectric Strength	Between coil and contacts	1000VAC 1 min.
	Between open contacts	500VAC 1 min.
Operate time (at nomi. Volt.)		Max. 10ms
Release time (at nomi. Volt.)		Max. 5ms
Temperature rise (at nomi. Volt.)		H: 50°C N,B: 60°C
Shock Resistance	Functional	98m/s² (10g)
	Destructive	980m/s² (100g)
Vibration Resistance		1.5mm 10 to 55Hz
Humidity		35% to 85% RH
Ambient temperature		-25°C to +55°C
Termination		PCB
Unit weight		5g
Construction		Sealed IP67 & Flux proof

SAFETY APPROVAL RATINGS

UL	B or N type coil:	2A 125VAC 1A 240VAC 1A 30VDC
	H type coil:	1A 125VAC 1A 30VDC
VDE (HM4101F)		1A 30VDC 1A 250VAC cos phi=1

ORDERING INFORMATION

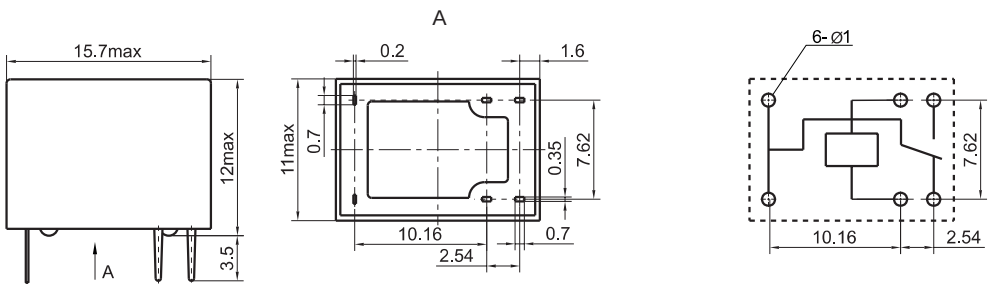
Type	HM4100F / HM4101F /	012	N	S
Coil voltage	3, 5, 6, 9, 12, 24 VDC			
Coil Power	H: 200mW N: 360mW B: 450mW			
Structure	S: Sealed Nil: Flux proof			

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

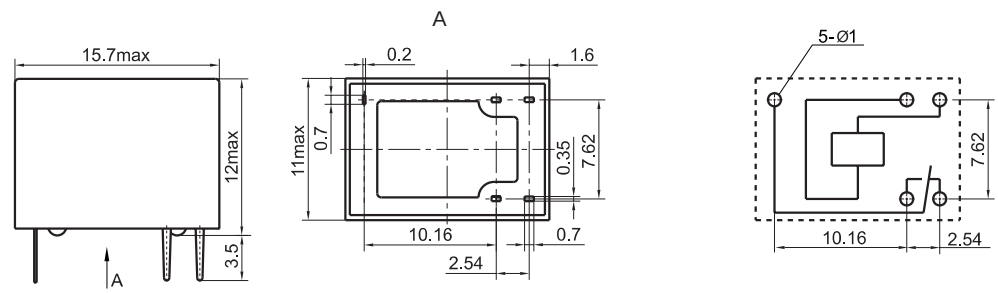
Outline Dimensions

Wiring Diagram & PCB layout

HM4100F

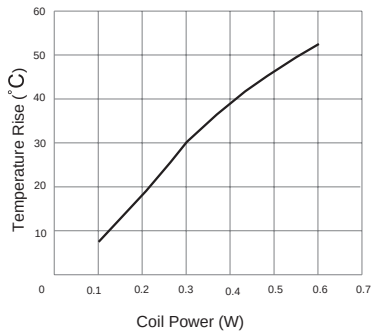


HM4101F

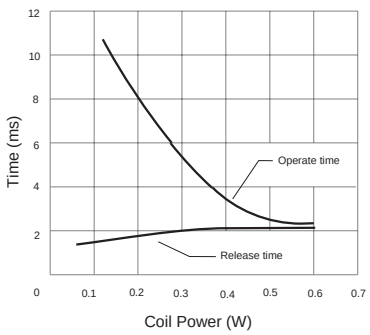


CHARACTERISTICS CURVE

TEMPERATURE RISE



OPERATE TIME



LIFE EXPECTANCY